United States Environmental Protection Agency

Region 10 Emergency Response Unit

POLLUTION REPORT

I. HEADING

Date: September 1, 2001
Subject: Industrial Chrome Plating
From: Dan Heister, OSC, USEPA, Region 10, Emergency Response Unit
Tel: Office (503) 326-6869
TO: See Distribution List on last page

POLREP No.1

II. BACKGROUND

Site ID: 8P
Delivery Order No: E-01-001
Response Authority: CERCLA
FPN No: 987175064
NPL Status: NA
State Notification: Oregon Department of Environmental Quality
Action Memo Status: August 2001
Removal Start Date: August 27, 2001
Expected Completion Date: October 2001

III. SITE INFORMATION

A. Incident Category

Fund-Lead Removal Action

B. Site Description

1. Site Location

The Industrial Chrome Plating site is located in a mostly residential neighborhood on the southeast corner of NE 62nd Avenue and NE Hassalo Street in Portland, Oregon. The Portland Rifle Club and Deluxe Fuel are west of the site; an empty lot is to the east. The southern boundary of the property borders the City of Portland's Tri-Met transportation railroad track and Interstate Highway 84, which are in a swale known as Sullivan Gulch.

The site consists of a main building and an outside storage area on 0.27 acres. The main building is separated into two parts: the northern portion and the southern portion. Most of the plating tanks are in the northern portion, while the southern portion contains a few smaller plating tanks and an area set aside for buffing and polishing parts. A small office is in the northwest corner of the building. The south side of the property has an asphalt driveway, a small patch of grass, and a large cellular communications tower. The southern portion of the property is fenced. Immediately south of the fence the terrain slopes steeply down for 15 to 20 feet into Sullivan Gulch and railroad tracks. Runoff water from the site flows to the gulch and railroad tracks, and access is unrestricted. The empty lot to the east of the site is fully fenced and contains a large advertisement billboard, and some parked trailers and boats. The east property boundary is fenced at the south end of the property and the building wall makes up the north end. Areas of gravel and broken asphalt make up a ten foot wide strip between the property and NE 62nd Avenue. On the west side of 62nd Avenue is the Portland Gun Club to the north and Deluxe Fuel to the south. North of the site is a residential neighborhood. Three houses are located directly across the street and one on the opposite corner of NE Hassalo and NE 62nd Avenue.

C. Assessment Results

In March of 1999, the EPA tasked Ecology and Environment Inc. (E & E) Superfund Technical Assessment and Response Team (START), to assess the risks associated with the Industrial Chrome Site. An integrated assessment of the site was conducted which identified elevated concentrations of chromium and lead at depth and in the surface of a majority of the samples. Based on the analytical results from this sampling event, the EPA tasked Ecology and Environment, Inc. to conduct a removal assessment at the ICP site to determine the full extent of surface and subsurface contamination both on and surrounding the ICP property.

Removal assessment results indicated the presence of hexavalent chromium in the surface soil contamination on the south and east sides of the building. Subsurface soil contamination is concentrated in the first ten feet on the south and east sides of the building. However, in the vicinity of the dry well (southeast of the building), significant subsurface soil contamination extends to a depth of at least 30 feet bgs, and subsurface soil. Subsurface soil samples collected from beneath the building also contained significant levels of contamination. Assessment of subsurface contamination west and south of the buildings was incomplete because overhead and subsurface utilities interfered with access to this area.

Many detections of lead in samples collected on the ICP property exceed Region 9 Preliminary Remediation Goals and/or Oregon Cleanup Levels.

Six people worked at the site until it voluntarily ceased operations in August 2001. The site is located in a mixed commercial/industrial and residential neighborhood with homes as little as 100 feet from the property to the north. Access to the site is not completely restricted, thereby increasing the potential for humans and animals to come in contact with contaminants. Soils to the south and east of the ICP building are fenced, preventing access to the area. Some of this area is capped with grass or asphalt; however, most of the contaminated area is exposed soil. Access to contaminated soils on the north and west side of the building is unrestricted. Soils on surrounding residential properties do not contain chromium above regulatory levels.

The possibility for off-site migration of chromium and lead, specifically via direct exposure to soil, particulates, surface water runoff, and groundwater can be reduced only if contaminated surface and subsurface soils at the site are removed or immobilized.

In August 2001, EPA obligated funds to conduct a removal of the soil contamination at the Industrial Chrome site which will involve: razing the building; excavating and properly disposing of contaminated soil and debris; and restoring the property so that it may be used in the future.

IV. Removal Activities

A. Situation

1. Current Situation

August 27, 2001 (Monday)
Personnel on site: Environmental Quality Management (EQM, 5 contractors), Rocky Mountain Catastrophe (RMCat, 2 contractors), Superfund Technical Assessment and Response Team (START, 1), and USEPA Federal On-scene Coordinator (FOSC,1) = Total of 9.
Weather: Sunny with a high of 81° F expected.

First day of removal, EQM personnel, the OSC, and START members conduct a site walk and discuss the first week tentative schedule. EQM is planning to spend the first week removing and consolidating plating liquids; separating organic solvents; organizing debris into scrap metal debris (to be taken off site as scrap metal) and general debris (to be removed with the building debris); decontaminating the building. The first task is setting

up site control. Starting tomorrow, building entry will be through the east door and a decontamination room. START begins setting-up high-volume air samplers.

August 28, 2001 (Tuesday)

Personnel on site: EQM (5 contractors), RMCat (2 contractors), START (2), and FOSC (2) = Total of 11.
Weather: Sunny with a high of 84° F expected.

The START team began setting up five air monitoring stations around the site. This is an alteration from the site Quality Assurance Project Plan (QAPP). The QAPP stated that four air monitoring stations would be set-up around the site. The certified-industrial hygienist recommended that a fifth air monitoring station be added to ensure complete coverage around the site. The START received the asbestos data from last week building inspection, no asbestos was detected in the building material.
The EQM and RMCat crew consolidated most of the plating liquids (chromic acid and hydrochloric acid) into one baker tank. About 3,000 gallons of plating liquids were transferred from various containers into the baker tank. Most of the vapor-suppressant plastic balls located in the 24-foot tank were decontaminated and removed. The RMCat crew field screened containers with unknown liquids. These containers were separated into either plating liquids and pumped into the baker tank or organic solvents and separated (to be removed later).

August 29, 2001 (Wednesday)

Personnel on site: EQM (5 contractors), RMCat (2 contractors), START (2), and FOSC (2) = Total of 11.
Weather: Sunny with a high of 81° F expected.

The START team finished setting up four of the five air monitoring stations around the site. All five high volume air samplers (one station has two high volume air samplers) are calibrated. The fifth air monitoring station will be set-up next week to complete the network.
EQM and RMCat (ERRS) crew continued to remove the plating solutions from the tanks. The tanks were then decontaminated and the decontamination rinse was added to the rest of the plating liquid. About 800 gallons of plating liquids and decontamination liquids were pumped into the baker tank. The metal tanks were staged for shipment off site as scrap metal. The plastic tanks are cut up and staged in a different area of the building.

August 30, 2001 (Thursday)

Personnel on site: EQM (5 contractors), RMCat (2 contractors), START (2), and FOSC (1) = Total of 10.
Weather: Sunny with a high of 84° F expected.

START began monitoring for off-site airborne migration of contamination (metals in particulate dust). All high-volume air sample filters were collected at the end of the day. The PDR data were downloaded into individual files.
EQM finished cutting up the plastic plating tanks and storing all of the scrap metal in separate areas of the building. All liquids were either staged in the shed into 55-gallon drums or 55-gallon overpacks (back of the building) or into the baker tank. The oven was picked up and taken offsite by another chrome plating facility.

August 31, 2001 (Friday)
Personnel on site: EQM (5 contractors), RMCat (2 contractors), START (3), and FOSC (1) = Total of 11.
Weather: Sunny with a high of 81° F expected.

START monitored for off-site migration of airborne contamination (metals in particulate dust). All high-volume air samples were collected at the end of the day. The PDR data were downloaded into individual files.
EQM vacuumed the inside of the plating shop. Primary areas of concern were the floors, rafters, and any other horizontal surfaces (e.g., window stills and tabletops) where dust accumulated. The scrap metal is removed by Metro Metals Northwest, Inc. The 24-foot dipping tank is picked up by another chrome plating facility.

2. Removal Actions to Date

August 27, 2001 (no wastes removed from the site).

August 28, 2001 (no wastes removed from the site).

August 29, 2001 (no wastes removed from the site).

August 30, 2001

Type	Quantity	Location Where Taken
Oven	1	

August 31, 2001:

Type	Quantity	Location Where Taken
Scrap metal for recycling only	10,940 lbs	Metro Metals Northwest, Inc.
24-foot dipping tank	1	Surgichrome, Inc

3. Enforcement

Enforcement actions are being reviewed at this time by EPA.

B. Planned Removal Activities

In the next few weeks, the following actions will occur in the following order: EQM will finish the internal building preparation, building demolition, soil assessment, shoring decisions, excavation, backfill of soil, and an asphalt cap. The building demolition and removal of building debris should be finished by next week. The following week, START will conduct subsurface soil sampling at the site to characterize the metals contamination. Subsurface soil samples will be collected with either a Geoprobe hydraulically driven sampler. After the contaminated soil is removed and clean backfill is imported, an asphalt cap will be installed at the property.

C. Next Steps

EPA and E&E to continue to conduct air sampling and site documentation for the removal action until completion. EPA and E&E are planning to conduct soil sampling, air sampling, X-Ray Fluorescence metals screening, subsurface soil contaminant delineation utilizing a hydraulically driven sampler, confirmation sampling, and site documentation for the removal action until completion.

V. Cost Information

Estimated costs are summarized below:

	Established Ceiling	Estimated Costs (as of 9/1/01)
EPA	$37,000	$2,250
START	$45,000	$27,500
ERRS	$400,000	$115,200
Total	$482,000	$144,950

Note: The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI Disposition of Wastes

No contaminated soil has been removed from site so far. The removal contractor is preparing the necessary documentation for proper disposal. Several disposal facilities may be utilized to remove all of the wastes. Only non hazardous wastes mentioned above in current removal actions have been disposed.

VII Distribution

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VII Status

Site actions continue.